

AMENDMENTS TO THE CLAIMS

Please amend the claims, as follows:

1. (Currently Amended) An opening/closing apparatus for an equipment case comprising a first case having a first hinge, a second case having a second hinge, and a hinge apparatus having a hinge main body comprising a first end part that is turnably connected to said first hinge of said first case about a first turning axis and comprising , and a second case turnably ~~connected to a second end part that is turnably connected to said second hinge of said second case of said hinge main body~~ about a second turning axis parallel to said first turning axis, said hinge main body being turned with respect to said first case and said second case being turned with respect to said hinge main body, thereby said second case being turnable with respect to said first case between a folded position and a developing position,

wherein said first hinge comprises a first turnable member that is turnably connected to a first fixing member, said first fixing member being non-turnably connected to one of said hinge apparatus and said first case, said first turnable member being non-turnably connected to the other of said hinge apparatus and said first case,

wherein said second hinge comprises a second turnable member that is turnably connected to a second fixing member, said second fixing member being non-turnably connected to one of said hinge apparatus and said second case, said second turnable member being non-turnably connected to the other of said hinge apparatus and said second case,

wherein between said first case and said hinge main body, there are provided a first stop means adapted to stop said hinge main body in a predetermined initial position when said hinge main body is turned to said predetermined initial position in a first direction so that said second case is turned toward said folded position from said developing position, a second stop means adapted to stop said hinge main body in a predetermined terminal position when said hinge main body is turned to said predetermined terminal position in a second direction so that said second case is turned toward said developing position from said folded position, a first turn prohibition means adapted to prohibit said hinge main body from turning in the second direction from said predetermined initial position with a

predetermined force generated from a first biasing means, and a second turn prohibition means adapted to prohibit said hinge main body from turning in said first direction from said terminal position with a predetermined force generated from the first biasing means.

between said second case and said hinge main body, there are provided a third stop means adapted to stop said second case in a predetermined intermediate position when said second case is turned to said predetermined intermediate position on the way toward said folded position from said developing position in an opening direction with respect to said hinge main body, a third turn prohibition means adapted to prohibit said second case from turning in said opening direction from said folded position with a predetermined force generated from a second biasing means, and a fourth turn prohibition means adapted to prohibit said second case from turning toward said folded position from said intermediate position in a closing direction with a predetermined force generated from the second biasing means, and

said prohibiting force of said first turn prohibition means is set to be larger than said prohibiting force of said third turn prohibition means, and said prohibiting force of said fourth turn prohibition means is set to be larger than said prohibiting force of said second turn prohibition means.

2. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 1, wherein said first turn prohibition means is a first turn biasing means adapted to turn bias said hinge main body in said first direction when said hinge main body is located in said predetermined initial position, said second turn prohibition means is a second turn biasing means adapted to turn bias said hinge main body in said second direction when said hinge main body is located in said terminal position, said third turn prohibition means is a third turn biasing means adapted to turn bias said second case in said closing direction when said second case is located in said folded position, and said fourth prohibition means is a fourth turn biasing means adapted to turn bias said second case in said opening direction when said second case is located in said intermediate position.

3. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 2, wherein ~~said hinge apparatus includes a first hinge for turnably connecting said first case and one end part of said hinge main body together about said first turning axis, and a second hinge for turnably connecting said second case and the other end part of said hinge main body together about said second turning axis,~~

said first hinge further includes a first movable member disposed at one of said first case and said hinge main body such that said first movable member is non-turnable but movable in the direction of said first turning axis, and the [[a]]first biasing means adapted to bias said first movable member toward said the other of said first case and said hinge main body,

between confronting surfaces of said first movable member and said the other of said first case and said hinge main body, there are provided a first conversion means adapted to convert the biasing force of said first biasing means acting on said first movable member when said hinge main body is located in said predetermined initial position, into a turn biasing force for turn biasing said hinge main body in said first direction, and a second conversion means adapted to convert the biasing force of said first biasing means acting on said first movable member when said hinge main body is located in said terminal position, into a turn biasing force for turn biasing said hinge main body in said second direction,

said first turn biasing means is constituted by said first biasing means and said first conversion means, and said second turn biasing means is constituted by said first biasing means and said second conversion means,

said second hinge further includes a second movable member disposed at one of said second case and said hinge main body such that said second movable member is non-turnable but movable in the direction of said second turning axis, and the [[a]]second biasing means adapted to bias said second movable member toward said the other of said second case and said hinge main body,

between confronting surfaces of said second movable member and said the other of said second case and said hinge main body, there are provided a third conversion means adapted to convert the biasing force of said second biasing means acting on said second movable member when said second case located in said folded position, into a turn biasing force for turn biasing said second case in said closing

direction, and a fourth conversion means adapted to convert the biasing force of said second biasing means acting on said second movable member when said second case is located in said intermediate position, into a turn biasing force for turn biasing said second case in said opening direction, and

said third turn biasing means is constituted by said second biasing means and said third conversion means, and said fourth turn biasing means is constituted by said second biasing means and said fourth conversion means.

4. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 1, wherein said folded position is restricted by abutment of said second case against said first case.
5. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 1, wherein said intermediate position is defined such that when said second case is located in said intermediate position, said second case is located on a line orthogonal to said first and second turning axes.
6. (Currently Amended) A two-axis hinge apparatus comprising a hinge main body, a first hinge disposed on said hinge main body with an axis thereof aligned with a first turning axis, and a second hinge disposed on said hinge main body with an axis thereof aligned with a second turning axis parallel to said first turning axis,

wherein said first hinge includes a first fixing member non-turnably disposed on said hinge main body and a first turnable member connected to said first fixing member such that said first turnable member is turnable between a first initial position and a first turning position, between said first fixing member and said first turnable member, there are provided a first turn prohibition means adapted to prohibit said first turnable member from turning toward said first turning position from said first initial position with a predetermined force generated from a first biasing means, and a second turn prohibition means adapted to prohibit said first turnable member from turning toward said first initial position from said first turning position with a predetermined force generated from the first biasing means, and a first stop means adapted to stop said first turnable member, which

~~would otherwise be turned toward said first initial position from said first turning position, in said first initial position with a predetermined force,~~
said second hinge includes a second fixing member non-turnably disposed on said hinge main body and a second turnable member connected to said second fixing member such that said second turnable member is turnable between a second initial position and a second turning position, between said second fixing member and said second turnable member, there are provided a third turn prohibition means adapted to prohibit said second turnable member from turning toward said second turning position from said second initial position with a predetermined force generated from a second biasing means, and a fourth turn prohibition means adapted to prohibit said second turnable member from turning toward said second initial position from said second turning position with a predetermined force generated from the second biasing means, and a fourth stop means adapted to stop said second turnable member, which would otherwise be turned toward said second initial position from said second turning position, in said second turning position with a predetermined force,
said turning direction toward said first turning position from said first initial position and said turning direction toward said second turning position from said second initial position are set to be same in direction,
said turn prohibiting force of said first turn prohibition means is set to be larger than said turn prohibiting force of said third turn prohibition means, and
~~said stopping force of said fourth stop means is set to be larger than said turn prohibiting force of said first turn prohibition means,~~
said turn prohibiting force of said fourth turn prohibition means is set to be larger than said turn prohibiting force of said second turn prohibition means, and
~~said stopping force of said first stop means is set to be larger than said turn prohibiting force of said fourth turn prohibition means.~~

7. (Currently Amended) A two-axis hinge apparatus according to claim 6, wherein said first hinge further includes a first movable member disposed between said first fixing member and said first turnable member and connected to said first fixing member such that said first movable member is non-turnable but movable in a direction of said first turning axis, and

said [[a]] first biasing means adapted to bias said first movable member toward said first turnable member along said first turning axis,

between confronting surfaces of said first turnable member and said first movable member, there are provided a first conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first initial position, into a turn biasing force for turn biasing said first turnable member toward said first initial position from said first turnable position, and a second conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first turnable position, into a turn biasing force for turn biasing said first turnable member toward said first turnable position from said first initial position, ~~and said first stop means;~~

said first turn prohibition means is constituted by said first conversion means and said first biasing means, and said second turn prohibition means is constituted by said second conversion means and said first biasing means, and said first turnable member, ~~which is turn biased by said first conversion means, is stopped in said first initial position by said first stop means;~~

said second hinge further includes a second movable member disposed between said second fixing member and said second turnable member and connected to said second fixing member such that said second movable member is non-turnable but movable in the direction of said second turning axis, and said [[a]] second biasing means adapted to bias said second movable member toward said second turnable member along said second turning axis,

between confronting surfaces of said second turnable member and said second movable member, there are provided a third conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second initial position into a turn biasing force for turn biasing said second turnable member toward said second initial position from said second turning position, and a fourth conversion means adapted to convert a turn biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second turning position, into a turn biasing force for turn biasing said second

turnable member toward said second turning position from said second initial position, ~~and said fourth stop means;~~

said third turn prohibition means is constituted by said third conversion means and said second biasing means, said fourth turn prohibition means is constituted by said fourth conversion means and said second biasing means, and said second turnable member, ~~which is turn biased by said fourth conversion means, is stopped in said second turnable position by said fourth stop means.~~

8. (Currently Amended) A two-axis hinge apparatus comprising a hinge main body, a first hinge disposed on said hinge main body with an axis thereof aligned with a first turning axis, and a second hinge disposed on said hinge main body with an axis thereof aligned with a second turning axis parallel to said first turning axis, wherein

said first hinge includes a first fixing member non-turnably disposed on said hinge main body and a first turnable member connected to said first fixing member such that said first turnable member is turnable between a first initial position and a first turning position, between said first fixing member and said first turnable member, there are provided a first turn prohibition means adapted to prohibit said first turnable member from turning toward said first turning position from said first initial position with a predetermined force generated from a first biasing means, and a second turn prohibition means adapted to prohibit said first turnable member from turning toward said first initial position from said first turning position with a predetermined force generated from the first biasing means, a first stop means adapted to stop said first turnable member in said first initial position on the way toward said first initial position from said first turning position with a predetermined force, and a second stop means adapted to stop said first turnable member in said first turning position on the way toward said first turning position from said first initial position with a predetermined force,

said second hinge includes a second fixing member non turnably disposed on said hinge main body and a second turnable member connected to said second fixing member such that said second turnable member is turnable between a second initial position and a second turning position, between said second fixing means and said second turnable member, there are provided a third turn prohibition

means adapted to prohibit said second turnable member from turning toward said second turning position from said second initial position with a predetermined force generated from a second biasing means, and a fourth turn prohibition means adapted to prohibit said second turnable member from turning toward said second initial position from said second turning position with a predetermined force generated from the second biasing means,
said turning direction toward said first turning position from said first initial position and said turning direction toward said second turning position from said second initial position are set to be same in direction,
said turn prohibiting force of said first turn prohibition means is set to be smaller than said turn prohibiting force of said third turn prohibition means, and
~~said stopping force of said second stop means is set to be larger than said turn prohibiting force of said third turn prohibition means,~~
said turn prohibiting force of said fourth turn prohibition means is set to be larger than said turn prohibiting force of said second turn prohibition means, and
~~said stopping force of said first stop means is set to be larger than said turn prohibiting force of said fourth turn prohibition means.~~

9. (Currently Amended) A two-axis hinge apparatus according to claim 8, wherein said first hinge further includes a first movable member disposed between said first fixing member and said first turnable member and connected to said first fixing member such that said first movable member is non-turnable but movable in the direction of said first turning axis, and said ~~[[a]]~~first biasing means adapted to bias said first movable member toward said first turnable member along said first turning axis,

between confronting surfaces of said first turnable member and said first movable member, there are provided a first conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first initial position, into a turn biasing force for turn biasing said first turnable member toward said first initial position from said first turning position, and a second conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first turning position,

into a turn biasing force for turn biasing said first turnable member toward said first turning position from said first initial position, ~~said first stop means and said second stop means,~~

said first turn prohibition means is constituted by said first conversion means and said first biasing means, said second turn prohibition means is constituted by said second conversion means and said first biasing means, said first turnable member, ~~which is turn biased by said first conversion means, is stopped in said first initial position by said first stop means,~~ and said first turnable member, which is turn biased by said second conversion means, ~~is stopped in said first turning position by said second stop means,~~

said second hinge further includes a second movable member disposed between said second fixing member and said second turnable member and connected to said second fixing member such that said second movable member is non turnable but movable in the direction of said second turning axis, and said ~~[[a]]~~ second biasing means adapted to bias said second movable member toward said second turnable member along said second turning axis,

between confronting surfaces of said second turnable member and said second movable member, there are provided a third conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second initial position into a turn biasing force for turn biasing said second turnable member toward said second initial position from said second turning position, and a fourth conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second turning position into a turn biasing force for turn biasing said second turnable member toward said second turning position from said second initial position,

said third turn prohibition means is constituted by said ~~third~~ conversion means and said second biasing means, and said fourth turn prohibition means is constituted by said fourth conversion means and said second biasing means.

10. (Currently Amended) A two-axis hinge apparatus comprising a hinge main body, a first hinge disposed on said hinge main body with an axis thereof aligned with a first turning axis, and a second hinge disposed on said hinge main body with an axis thereof aligned with a second turning axis parallel to said first turning axis, wherein

said first hinge includes a first fixing member non-turnably disposed on said hinge main body and a first turnable member connected to said first fixing member such that said first turnable member is turnable between said first initial position and said first turning position, between said first fixing member and said first turnable member, there are provided a first turn prohibition means adapted to prohibit said first turnable member from turning toward said first turning position from said first initial position with a predetermined force generated from a first biasing means, and a second turn prohibition means adapted to prohibit said first turnable member from turning toward said first initial position from said first turning position with a predetermined force generated from the first biasing means,

said second hinge includes a second fixing member non-turnably disposed on said hinge main body and a second turnable member connected to said second fixing member such that said second turnable member is turnable between said second initial position and said second turning position, between said second fixing member and said second turnable member, there are provided a third turn prohibition means adapted to prohibit said second turnable member from turning toward said second turning position from said second initial position with a predetermined force generated from a second biasing means, and a fourth turn prohibition means adapted to prohibit said second turnable member from turning toward said second initial position from said second turning position with a predetermined force generated from the second biasing means, ~~a third-stop means adapted to stop said second turnable member in said second initial position on the way toward said second initial position from said second turning position with a predetermined force, and a fourth-stop means being adapted to stop said second turnable member in said second turning position on the way toward said second turning position from said second initial position with a predetermined force,~~

said turning direction toward said first turning position from said first initial position and said turning direction toward said second turning position from said second initial position are set to be same in direction,
said turn prohibiting force of said first turn prohibition means is set to be larger than said turn prohibiting force of said third turn prohibition means, and
~~said stopping force of said fourth stop means is set to be larger than said turn prohibiting force of said first turn prohibition means;~~
said turn prohibiting force of said second turn prohibition means is set to be larger than said turn prohibiting force of said fourth turn prohibition means; and
~~said turn prohibiting force of said second turn prohibition means is set to be smaller than the stopping force of said third stop means.~~

11. (Currently Amended) A two-axis hinge apparatus according to claim 10, wherein said first hinge-fixing member further includes a first movable member disposed between said first fixing member and said first turnable member and connected to said first fixing member such that said first movable member is non-turnable but movable in the direction of said first turning axis, and said ~~[[a]]~~ first biasing member adapted to bias said first movable member toward said first turnable member along said first turning axis,

between confronting surfaces of said first turnable member and said first movable member, there are provided a first conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first initial position, into a turn biasing force for turn biasing said first turnable member toward said first initial position from said first turning position, and a second conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable-movable member is located in said first turning position, into a turn biasing force for turn biasing said first turnable member toward said first turning position from said first initial position,

said first turn prohibition means is constituted by said first conversion means and said first biasing means, and said second turn prohibition means is constituted by said second conversion means and said first biasing means,

said second hinge further includes a second movable member disposed between said second fixing member and said second turnable member and connected to said second fixing member such that said second movable member is non-turnable but movable in the direction of said second turning axis, and said ~~[[a]]~~second biasing means adapted to bias said second movable member toward said second turnable member along said second turning axis,

between confronting surfaces of said second turnable member and said second movable member, there are provided a third conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when ~~said turnable-second~~ movable member is located in said second initial position, into a turn biasing force for turn biasing said second turnable member toward said second initial position from said second turning position; and a fourth conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second turning position, into a turn biasing force for turn biasing said second turnable member toward said second turning position from said second initial position, ~~a third stop means and a fourth stop means;~~

said third turn prohibition means is constituted by said third conversion means and said second biasing means, said fourth turn prohibition means is constituted by said fourth conversion means and said second biasing means, said second turnable member, which is turn biased by said third conversion means, ~~is stopped in said second initial position by said third stop means;~~ and said second turnable member, which is turn biased by said fourth conversion means, ~~is stopped in said second turning position by said fourth stop means.~~

12. (Currently Amended) A two-axis hinge apparatus comprising a hinge main body, a first hinge disposed on said hinge main body with an axis thereof aligned with a first turning axis, and a second hinge disposed on said hinge main body with an axis thereof aligned with a second turning axis parallel to said first turning axis, wherein

said first hinge includes a first fixing member non-turnably disposed on said hinge main body and a first turnable member connected to said first fixing member such that said first turnable member is turnable between a first initial position and a first

turning position, between said first fixing member and said first turnable member, there are provided a first turn prohibition means adapted to prohibit said first turnable member from turning toward said first turning position from said first initial position with a predetermined force generated from a first biasing means, and a second turn prohibition means adapted to prohibit said first turnable member from turning toward said first initial position from said first turning position with a predetermined force generated from the first biasing means, and a second stop means adapted to stop said first turnable member in said first turning position on the way toward said first turning position from said first initial position with a predetermined force;

said second hinge includes a second fixing member non-turnably disposed on said hinge main body and a second turnable member connected to said second fixing member such that said second turnable member is turnable between a second initial position and a second turning position, between said second fixing member and said second turnable member, there are provided a third turn prohibition means adapted to prohibit said second turnable member from turning toward said second turning position from said second initial position with a predetermined force generated from a second biasing means, and a fourth turn prohibition means adapted to prohibit said second turnable member from turning toward said second initial position from said second turning position with a predetermined force generated from the second biasing means, and a third stop means adapted to stop said second turnable member, which would otherwise be turned toward said second initial position from said second turning position, in said second initial position with a predetermined force;

said turning direction toward said first turning position from said first initial position and said turning direction toward said second turning position from said second initial position are set to be same in direction,

said turn prohibiting force of said first turn prohibition means is set to be smaller than said turn prohibiting force of said third turn prohibition means, and said stopping force of said second stop means is set to be larger than said turn prohibiting force of said third turn prohibition means;

said turn prohibiting force of said second turn prohibition means is set to be larger than said turn prohibiting force of said fourth turn prohibition means; and
~~said turn prohibiting force of said second turn prohibition means is set to be smaller than said stopping force of said second stop means.~~

13. (Currently Amended) A two-axis hinge apparatus according to claim 12, wherein said first hinge further includes a first movable member disposed between said first fixing member and said first turnable member and connected to said first fixing member such that said first movable member is non-turnable but movable in the direction of said first turning axis, and said ~~[[a]]~~first biasing means adapted to bias said first movable member toward said first turnable member along said first turning axis,

between confronting surfaces of said first turnable member and said first movable member, there are provided a first conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first initial position into a turn biasing force for turn biasing said first turnable member toward said first initial position from said first turning position, and a second conversion means adapted to convert a biasing force of said first biasing means acting on said first movable member when said first turnable member is located in said first turning position into a turn biasing force for turn biasing said first turnable member toward said first turning position from said first initial position, ~~and said second stop means,~~

said first turn prohibition means is constituted by said first conversion means and said first biasing means, said second turn prohibition means is constituted by said second conversion means and said first biasing means, and said first turnable member, which is turn biased by said second conversion means, ~~is stopped in said first turning position by said second stop means,~~

said second hinge further includes a second movable member disposed between said second fixing member and said second turnable member and connected to said second fixing member such that said second movable member is non-turnable but movable in the direction of said second turning axis, and said ~~[[a]]~~second biasing means adapted to bias said second movable member towards said second turnable member along said second turning axis,

between confronting surfaces of said second turnable member and said second movable member, there are provided a third conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second initial position into a turn biasing force for turn biasing said second turnable member toward said second initial position from said second turning position, and a fourth conversion means adapted to convert a biasing force of said second biasing means acting on said second movable member when said second turnable member is located in said second turning position into a turn biasing force for turn biasing said second turnable member toward said second turning position from said second initial position, ~~and said third stop means, and~~

said third turn prohibition means is constituted by said third conversion means and said second biasing means, said fourth turn prohibition means is constituted by said fourth conversion means and said second biasing means, and said second turnable member, ~~which is turn biased by said third conversion means, is stopped in said second initial position by said third stop means.~~

14. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 2, wherein said folded position is restricted by abutment of said second case against said first case.
15. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 3, wherein said folded position is restricted by abutment of said second case against said first case.
16. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 2, wherein said intermediate position is defined such that when said second case is located in said intermediate position, said second case is located on a line orthogonal to said first and second turning axes.
17. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 3, wherein said intermediate position is defined such that when said second case is

located in said intermediate position, said second case is located on a line orthogonal to said first and second turning axes.

18. (Previously Presented) An opening/closing apparatus for an equipment case according to claim 4, wherein said intermediate position is defined such that when said second case is located in said intermediate position, said second case is located on a line orthogonal to said first and second turning axes.